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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/619,664

07/15/2003

Edward Williams

81045352

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28395

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08/26/2008

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EXAMINER

SAINDON, WILLIAM V

ART UNIT

PAPER NUMBER

3623

MAIL DATE

DELIVERY MODE

08/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/619,664

Applicant(s)

WILLIAMS ET AL.

Examiner

William V. Saindon

Art Unit

3623

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-14 and 16-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-14 and 16-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)
- Paper No(s)/Mail Date 20080515
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The following FINAL Office Action is in response to Applicant's submission received May 15, 2008. Claims 1, 11, and 22 have been amended. Claims 4 and 15 have been canceled. No claims have been added. Therefore, claims 1-3, 5-14, and 16-23 are pending.

Response to Amendment

2. The amendments to the claims are acknowledged.

Response to Arguments

3. The 35 USC § 112 ¶ 1 rejection of claims 1-23 for lack of enablement is withdrawn in light of Applicant's arguments. The Examiner is persuaded by the arguments.

4. The 35 USC § 112 ¶ 1 rejection of claims 1-23 for lack of written description is withdrawn in light of Applicant's arguments. The Examiner is persuaded by the arguments.

5. The 35 USC § 103 rejection of claims 1-23 as unpatentable over Golightly et al. (US 2003/0046130) is not withdrawn in light of Applicant's arguments. Applicant argues:

- I. Golightly does not teach utilizing probability in the model. Arguments at 9.
- II. Golightly teaches away from utilizing statistical models. Arguments at 10.

As to argument I, the Examiner respectfully disagrees. As provided in ¶ 19, Golightly states that the use of statistical models is favorable when fundamental models do not accurately describe the properties of a product. That is to say, models that take into account variability [uncertainty] are better than straight models relying on fundamental, certain, outcomes. Statistical models, such as non-linear regression, account for the uncertainty of data by considering the fact that a certain factor is not constant, but variable according to a non-linear fashion. The model therefore uses this non-linear model to account for the uncertainty of the factor's value.

As to argument II, the Examiner respectfully disagrees. Applicant misapplies the "teaching away" rebuttal. A reference "teaches away" from an idea when it "criticiz[es], discredit[s], or otherwise discourage[s] the solution claimed...." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). In Golightly, the inventors merely state that there are difficulties with the use of statistical models (see ¶¶ 19-23). Golightly, however, does not tell the reader to not use statistical models, to try another method, or otherwise criticize, discredit, or discourage statistical models. In fact, Golightly considers statistical models for use in his invention. See ¶ 82, noting that one of the plurality of models used by his invention can be "a statistical model." Therefore, Golightly cannot discourage the use of statistical models when he uses them himself.

6. The Examiner notes that **Applicant has not addressed** the 35 USC § **112 ¶ 2 rejections** of claims 2-3, 12-14, and 23.

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7. The Examiner notes the requirements for traversing official notice from MPEP § 2144.03:

To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b).

If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate [emphasis added].

Because Applicant has not specifically pointed out any errors in the Examiner's action, the officially noticed facts in the November 15, 2007 Office Action are deemed admitted prior art.

8. The Examiner notes that the Office Action mailed November 15, 2007 contained a section 11 titled "Information Disclosure Statement" that was not addressed by Applicant. The section clearly pointed out that Applicant had 1 month from the mailing date of the action to comply with 37 CFR 1.98(b), and that no extensions of time would be given. Because no such submission was received within the provided time period, the submitted IDS will not be considered. See 37 CFR 1.97(i).

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 2-3, 12-14, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 2, 12, and 23, it is unclear how the defining of a computer experiment differs from inputting data. It would seem that the input of data for use in a model would be the experiment.

As to claims 3, 13, and 23, it is unclear how the equation is being calculated. Does the Applicant mean that a known equation is used (i.e. calculated) or that an equation is generated (e.g. a regression equation from known data)?

Claim Rejections - 35 USC § 103

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claims 1-3, 5-14, and 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Golightly et al. (US 2003/0046130) (hereinafter Golightly).

As to claim 1, Golightly discloses a system for modeling, the system comprising a computer configured to:

receive input data defining customer characteristics, facility capabilities, and financial data for an automobile service facility [i.e. input data] (see Fig. 2C, ¶¶ 30 and

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32, noting that the input data takes the form of customer data, financial data, and other suitable variables. See also ¶ 47-49, noting that the model also uses facility capabilities such as systems, processes, production, maintenance, and other relevant input data);

generate a computer model of the service facility based on the customer characteristics, facility capabilities, and financial data the model utilizes probability to account for uncertainty in at least a portion of the input data [i.e. use the model] (see id., noting that model 215 is used; ¶ 19, noting that using probability in models is well known); and

output one or more quantitative indications of expected facility performance based on the model (see id., noting that action variables provide predictive metrics from the model based on the input).

Golightly does not explicitly disclose the intended use of modeling automobile service centers.

However, Golightly does disclose that the model can be a process model or maintenance model (see ¶ 47, noting that automotive service centers are well known to perform maintenance).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to specify that the inputs in Golightly were to be used to model an automobile service center because models like Golightly are well known and provide the predictable result of providing insight into the behavior of a system in order to make decisions based upon the results of the model. Furthermore, automotive service centers are a well known entity, as most people have vehicles, and the centers are well

known for providing maintenance, which Golightly expressly considers for modeling (see ¶ 47).

As to claim 2, Golightly discloses defining a computer experiment to identify one or more service facility characteristics that have an impact on service facility efficiency or revenue (see ¶ 33, noting that the model output is used for analysis and decision making, based upon defined model inputs, for the purpose of improving the defined entity).

As to claim 3, Golightly discloses to calculate and output an equation quantitatively interrelating one or more of the service facility characteristics that have an impact on service facility efficiency or revenue [i.e. output efficiency or revenue data] (see ¶¶ 33-34, noting that the model can be used to interrelate the above noted inputs by providing a tool for analysis and decision making, including process control, which affects efficiency and revenue).

As to claims 5-10, various variables for use in the model are recited. All of the claimed variables are well known to apply to service centers and are not novel variables in and of themselves. The Examiner previously took Official Notice that arrival rates, personnel quantities, service times, part and labor revenue, and time to process are old and well known in the art of scheduling. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to include each of these variables in the model in Golightly, for the purpose of providing a comprehensive model that could provide the most optimal course of action.

Claims 11-13 are rejected for similar reasons as claims 1-3, respectively.

As to claim 14, Golightly discloses changing the operation of the service facility to improve efficiency or revenue based at least in part on the relative quantitative significance of factors making up the quantitative expression (see ¶ 32, noting that the model is used to find an optimal price).

Claims 16-21 are rejected for similar reasons as claims 5-10, respectively.

Claims 22-23 are rejected for similar reasons as claims 1-2, respectively.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William V. Saindon whose telephone number is (571)270-3026. The examiner can normally be reached on M-F 7:30-5; alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/wvs/

/Beth V. Boswell/
Supervisory Patent Examiner, Art Unit 3623